

*[Journal of Geophysical Research: Atmospheres]*

Supporting Information for

**Drivers and surface signal of inter-annual variability of boreal stratospheric final warmings**

R. Thiéblemont1, B. Ayarzagüena2,3, K. Matthes4,5, S. Bekki6, J. Abalichin7, and U. Langematz7

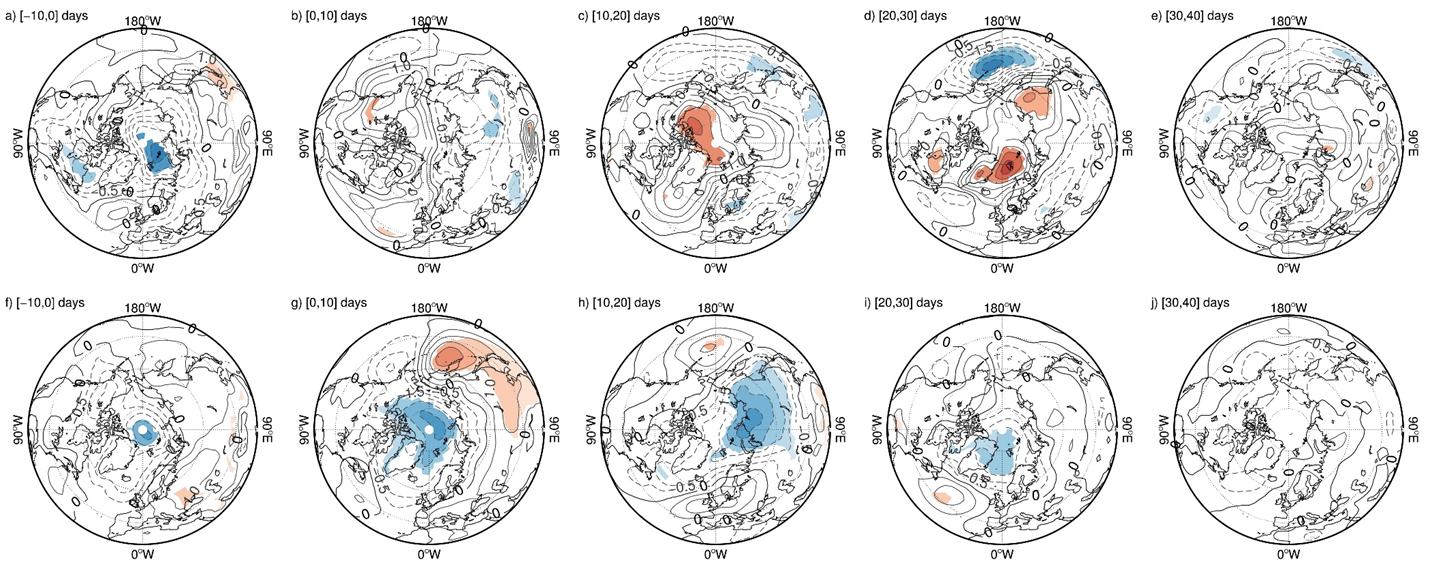
1Laboratoire des Sciences du Climat et de l'Environnement (LSCE), CNRS, Saint-Aubin, France. 2Universidad Complutense de Madrid (UCM), Madrid, Spain. 3Instituto de Geociencias, CSIC-UCM, Madrid, Spain. 4GEOMAR-Helmholtz Centre for Ocean Research, Kiel, Germany. 5Christian-Albrechts-Universität zu Kiel (CAU), Kiel, Germany. 6Laboratoire Atmosphères, Milieux, Observations Spatiales (LATMOS), CNRS, Guyancourt, France. 7Freie Universität Berlin (FUB), Berlin, Germany.

**Contents of this file**

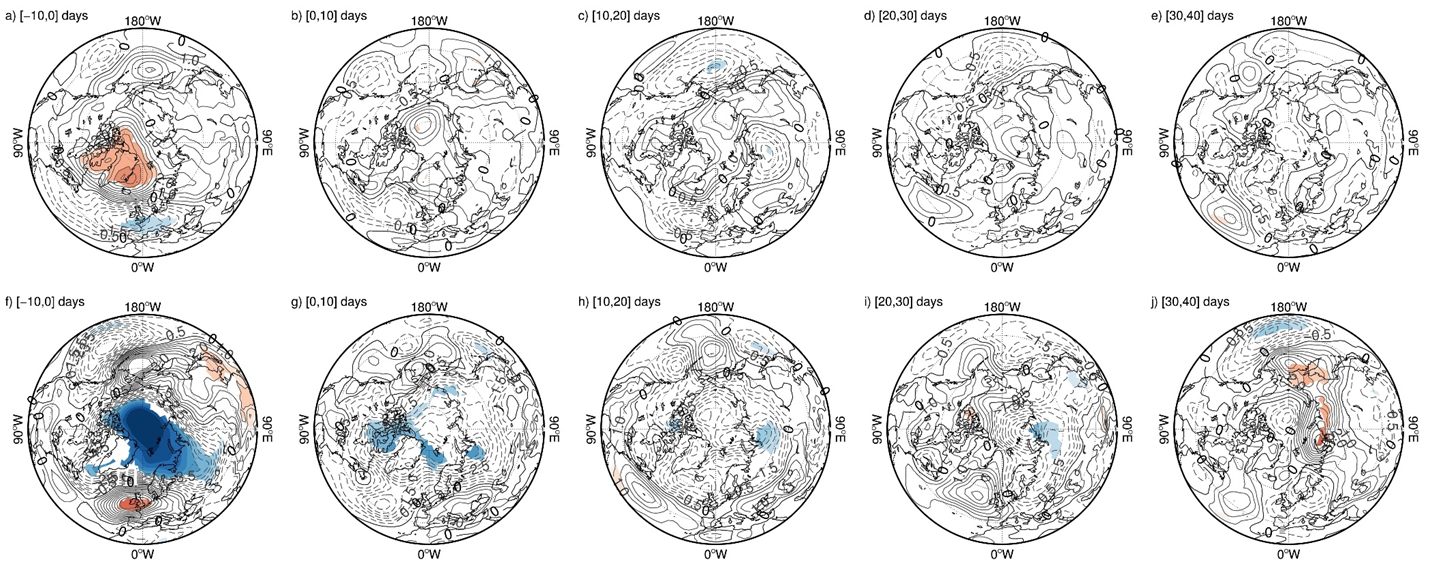
Figures S1 to S6

**Introduction**

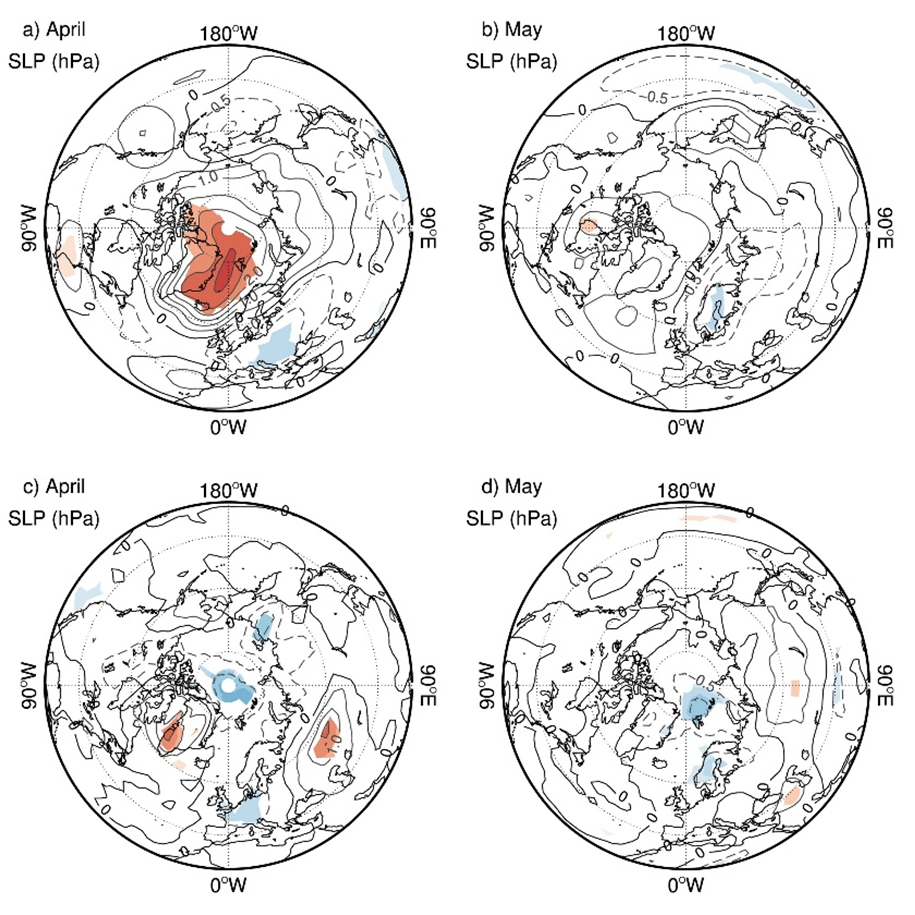
Supporting material repeats CESM1(WACCM) composite analysis presented in the main manuscript but for ERA-Interim reanalyses and EMAC-O multi-decadal simulation (140 years).

****

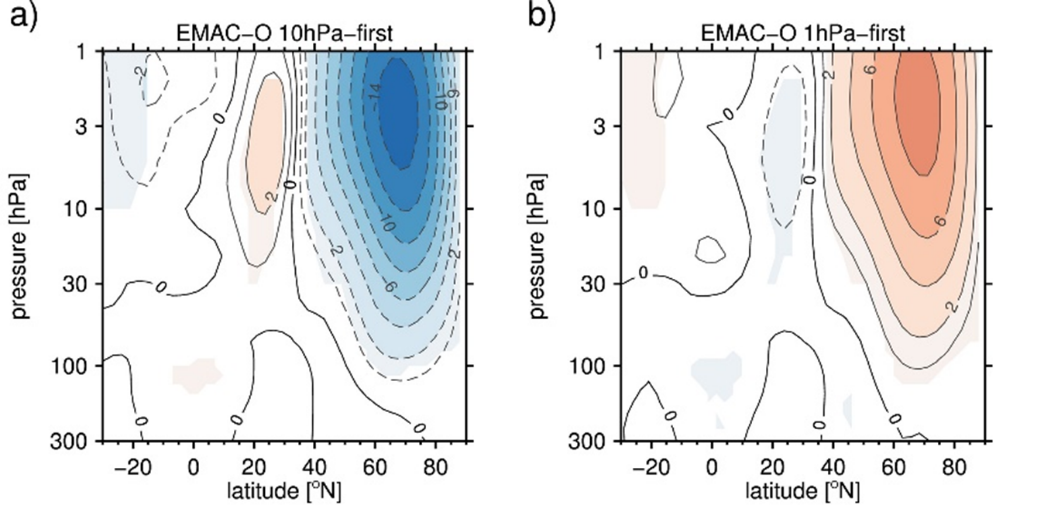
**Figure S1.** Same as Figure 3 but for EMAC-O.

****

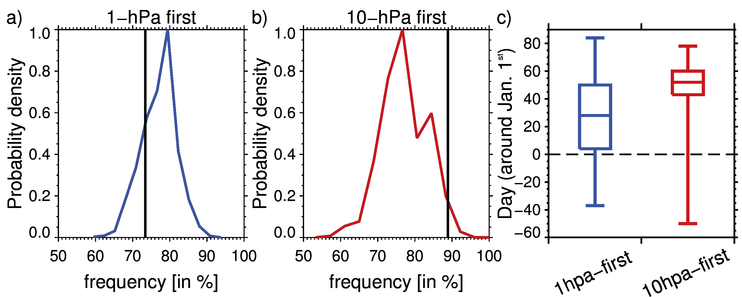
**Figure S2.** Same as Figure 3 but for ERA-Interim

****

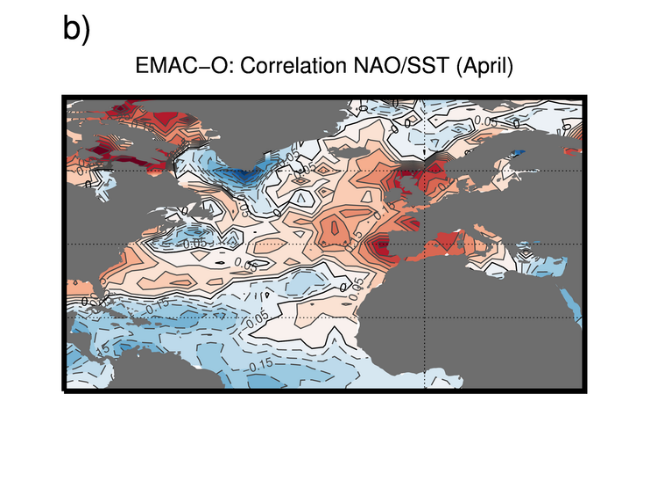
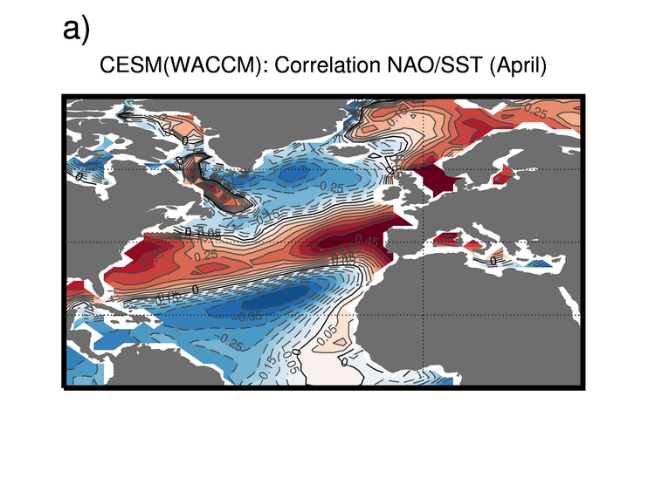
**Figure S3.** Same as Figure 5(a-d) but for EMAC-O.

****

**Figure S4.** Same as Figure 6 but for EMAC-O.

****

**Figure S5.** Same as Figure 7 but for EMAC-O.

****

**Figure S6.** Correlation coefficient pattern between the NAO index in April and the North Atlantic SST field for (a) CESM(WACCM) and (b) EMAC-O.